

<110> Ellington, Andrew
Jhaveri, Sulay
Rajendran, Manjula

<120> In Vitro Selection of Signaling Aptamers

<130> D6297D

<141> 2003-10-16

<150> USSN 10/014,973

<151> 2001-10-26

<160> 19

<210> 1

<211> 102

<212> DNA

<213> artificial sequence

<220>

<221> primer_bind

<222> 31..81

<223> Sequence of 102-mer oligonucleotide used to
synthesize RNA signaling aptamer; n = any
and is a random insert of 3:3:2:0.38 A:C:G:T

<400> 1

```
taatacgact cactataggg aaggcagcagac nnnnnnnnnnn nnnnnnnnnnn 50
nnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nagacccaac cagccagaga 100
cc                                                    102
```

<210> 2

<211> 85

SEQ 1

<212> RNA
 <213> artificial sequence

 <220>
 <221> misc_RNA
 <222> 14..64
 <223> Sequence of the RNA pool used for selection.
 n = any and is a random insert of 33.1% A, C, and
 G, 6% U. Uridine residues are replaced by F-12-U.

 <400> 2

 gggaaggcac gacnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn 50
 nnnnnnnnnnn nnnnagaccc aaccagccag agacc 85

 <210> 3
 <211> 40
 <212> RNA
 <213> artificial sequence

 <220>
 <223> Minimal anti-adenosine aptamer ATP-40-1

 <300>
 <301> Sassanfar, M.
 Szostak, J.W.
 <302> An RNA motif that binds ATP
 <303> Nature
 <304> 364
 <306> 550-553
 <307> 1994

 <400> 3

 gggguugggaa gaaacugugg cacuucggug ccagcaaccc 40

<210> 4
<211> 51
<212> RNA
<213> artificial sequence

<220>
<223> Sequence of the 51 nucleotide random region
from cloned aptamer raf15 in Family 1

<400> 4

gaagcaagca ggcaacgaac acagaagacc gggggaacua ccgcgcgugc u 51

<210> 5
<211> 51
<212> RNA
<213> artificial sequence

<220>
<223> Sequence of the 51 nucleotide random region
from cloned aptamer raf17 in Family 1

<400> 5

gaagcaagca ggcaacgaac acagaagacc gggggaacua ccgcgcgugc c 51

<210> 6
<211> 51
<212> RNA
<213> artificial sequence

<220>
<223> Sequence of the 51 nucleotide random region
from cloned aptamer raf134 in Family 1

<400> 6

gaagcaagca ggcaacgaac acagaagacc gggggaacua ccgcgcgugc g 51

<210> 7

<211> 51

<212> RNA

<213> artificial sequence

<220>

<223> Sequence of the 51 nucleotide random region
from cloned aptamer raf110 in Family 2

<400> 7

cgcggguaaa caggggcaaa agcggcaggg cccagaagga uaacaguagc a 51

<210> 8

<211> 51

<212> RNA

<213> artificial sequence

<220>

<223> Sequence of the 51 nucleotide random region
from cloned aptamer raf111 in Family 3

<400> 8

aggggacgga gcccuaagac aaaggagggc ggcaggaugc caaacaggua g 51

<210> 9

<211> 53

<212> RNA

<213> artificial sequence

<220>

SEQ 4

<223> Sequence of the 53 nucleotide random region
 from cloned aptamer raf18 in Family 3

<400> 9

aggggacgga gccccaaaga caaaggaggg cggcaggaug ccagaacagg uag 53

<210> 10

<211> 51

<212> RNA

<213> artificial sequence

<220>

<223> Sequence of the 51 nucleotide random region
 from cloned aptamer raf133 in Family 3

<400> 10

aggggacgga gcccaaagac aaaggagggc ggcaggaagc caaacaggua g 51

<210> 11

<211> 51

<212> RNA

<213> artificial sequence

<220>

<223> Sequence of the 51 nucleotide random region
 from cloned aptamer raf133 in Family 4

<400> 11

gaagagccgg cggcgaggcg cgaggccagg aagaaccggc cgcacggagg g 51

<210> 12

<211> 51

<212> RNA

<213> artificial sequence

<220>

<223> Sequence of the 51 nucleotide random region
from cloned aptamer raf114 in Family 5

<400> 12

gcaccgacga ggaggaggag gggagaggaa gggcgccgua gccgggcggg g 51

<210> 13

<211> 51

<212> RNA

<213> artificial sequence

<220>

<223> Sequence of the 51 nucleotide random region
from cloned aptamer raf120 in Family 5

<400> 13

gcaccgacga ggagguggag gggagaggaa gggcgccgua gccgggaagg g 51

<210> 14

<211> 51

<212> RNA

<213> artificial sequence

<220>

<223> Sequence of the 51 nucleotide random region
from cloned aptamer raf126 in Family 5

<400> 14

gaggccagga gacgaaaggc gaaccaacaa ggcaggcaga gcccgugca c 51

<210> 15
 <211> 51
 <212> RNA
 <213> artificial sequence

<220>
 <223> Sequence of the 51 nucleotide random region
 from cloned aptamer raf128 in Family 5

<400> 15

cgcgcaagau accgcccgcac agcggaagga ggggcaugcg guccagggcu g 51

<210> 16
 <211> 6
 <212> RNA
 <213> artificial sequence

<220>
 <223> Sequence of the 6 nucleotide motif shared by
 Families 1 and 2

<400> 16

cagaag 6

<210> 17
 <211> 85
 <212> RNA
 <213> artificial sequence

<220>
 <222> 52, 60
 <223> Sequence of the cloned aptamer raf17 in
 Family 1;u is 12-F-u at positions 52 and 61

<400> 17

gggaaggcac gacgaagcaa gcaggcaacg aacacagaag accgggggaa 50
 cuaccgcgcg ugccagaccc aaccagccag agacc 85

<210> 18
 <211> 85
 <212> RNA
 <213> artificial sequence

<220>
 <222> 52
 <223> Sequence of the cloned aptamer raf17-U61C in
 Family 1; u is 12-F-u at position 52

<400> 18

gggaaggcac gacgaagcaa gcaggcaacg aacacagaag accgggggaa 50
 cuaccgcgcg cgccagaccc aaccagccag agacc 85

<210> 19
 <211> 61
 <212> RNA
 <213> artificial sequence

<220>
 <222> 48
 <223> Sequence of the cloned aptamer raf17s in
 Family 1; u is 12-F-u at position 48

<400> 19

gggcgcgcgcg aagcaagcag gcaacgaaca cagaagaccg ggggaacuac 50
 cgcgcgcgccc c 61